

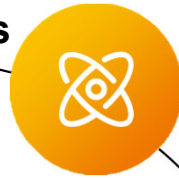
Липень 2025

Huawei ICT Academy: Каталог курсів



Класифікація курсів

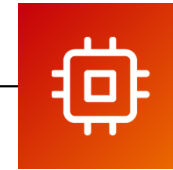
General Courses (Загального спрямування)



Для всіх студентів, які бажають почати свій шлях в опануванні ІКТ. Загальні курси рекомендуються для проходження студентам всіх технічних спеціальностей

- Без вимог до спеціальності студентів
- Безкоштовно
- Формат самонавчання
- 2 - 4 заняття/курс

Professional Courses (Вузької спеціалізації)




Для студентів, які хочуть отримати практичні навички для роботи на технічних посадах початкового рівня

- Тісно пов'язані з сертифікатами Huawei, які широко визнані в різних галузях
- Зазвичай під керівництвом інструктора і приблизно 32-128 уроків на курс
- Поєднання практичних занять та інтерактивного досвіду

Карта огляду навчальних курсів

Натисніть на назву курсу ➤ Перенаправлення на курс

 Тренінг для інструкторів

 Самонавчання  3 подальшою сертифікацією

 Бейдж

Professional Courses

Connectivity



[Data Communication and Network](#)



[Principles and Applications of WLAN](#)



[5G Network and Applications](#)

Cloud & Computing



[Principles and Applications of Cloud Computing](#)



[Data Storage](#)



[Artificial Intelligence Technology and Applications](#)



[Cloud-Tech Essentials](#)



[Operating System Basics and Practice A Hands-on Approach with openEuler](#)

App Develop



[Internet of Things Technology and Applications](#)



[Huawei ICT Competition 2023-2024 Practice Competition Practical Course \(Network Track | Cloud Track | Computing Track \)](#)

General Courses



[5G Basics: What it's all about](#)



[Overview of IoT Technologies](#)



[Computer Network](#)



[Digital Power](#)



[5G Network Architecture and Key Technologies](#)



[Data Management and Analytics](#)



[Development and Basic Concepts of Cloud Computing](#)



[Overview of AI](#)



[Information Representation and Data Organization](#)



[Cloud Advanced: Architecture and Technologies](#)



[Search and AI](#)



[Algorithm and Program Design](#)



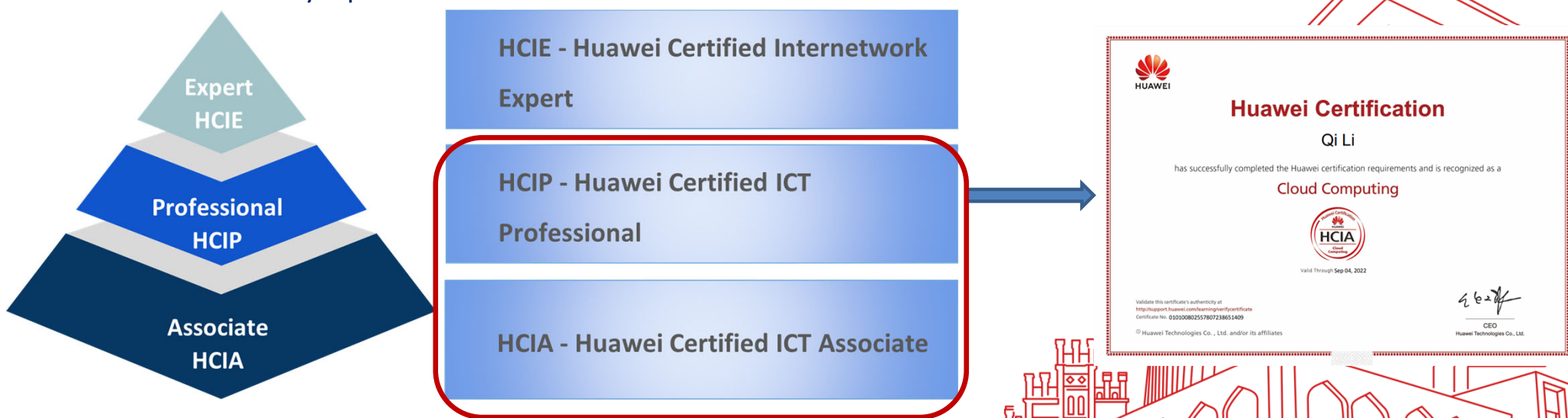
[Exploring the Intelligent World 2030](#)



Іспит на сертифікацію Huawei Professional Career Certification

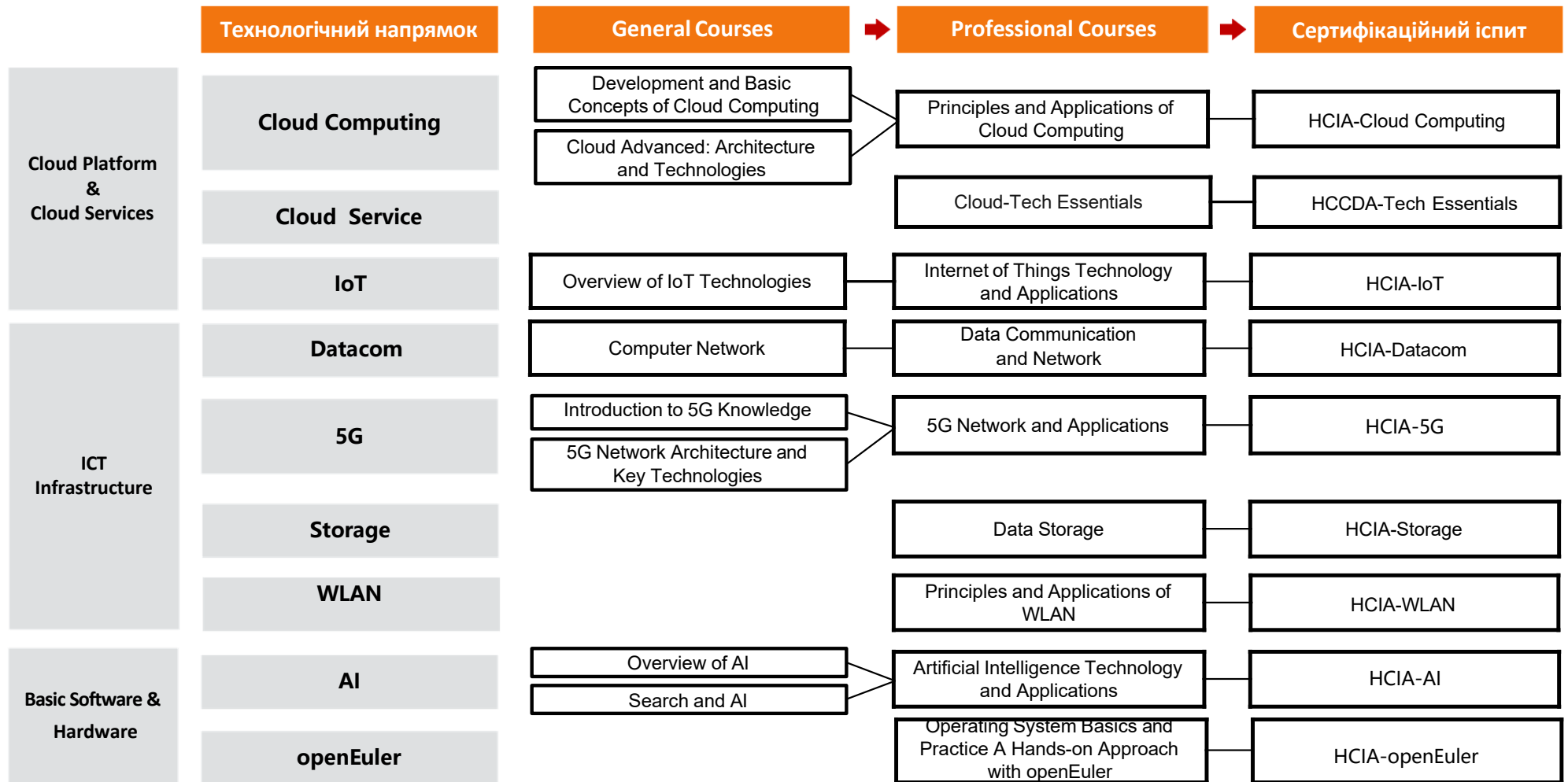
Факультативно для студентів

- ✓ Після успішного складання випускного іспиту учень може в електронному вигляді подати заявку на отримання безкоштовного ваучера на іспит.



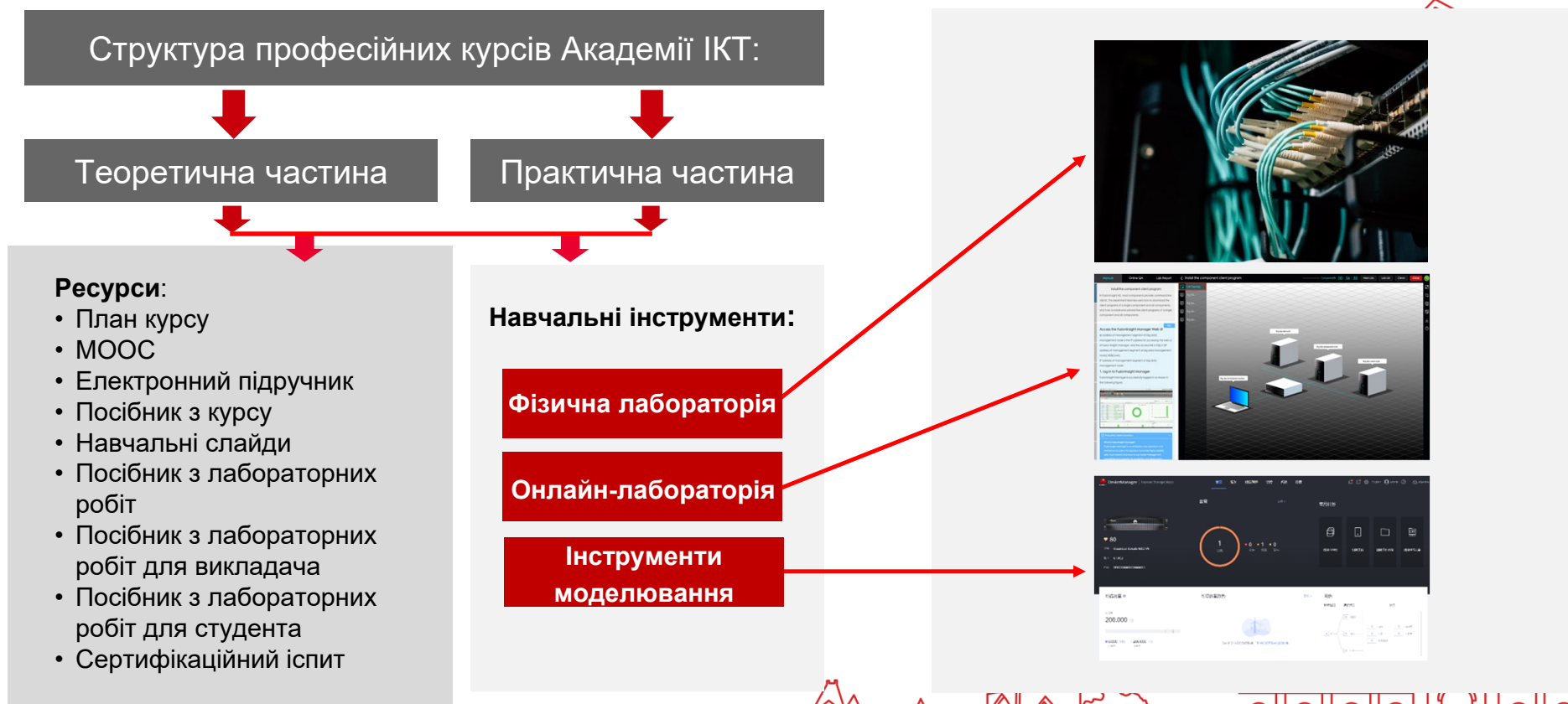
- **(HCIA)** Асоційований рівень галузевої сертифікації забезпечує «передавані навички» в технологічній сфері - учні можуть застосовувати передані знання до обладнання будь-якого постачальника
- Всі курси охоплюють теорію та практику (з лабораторними вправами/експериментами)
- Курси рівнів **HCIA** та **HCIP** доступні для ІКТ-академій

Шлях до навчання та іспитів





Структура курсу Huawei ICT Academy





Huawei ICT Academy - Цифрові бейджі (Digital Badges)

Спеціально розроблено для викладачів та студентів, щоб продемонструвати свої досягнення у викладанні та навчанні



44

Бейджі отримали студенти
Huawei ICT Academy Ukraine у
2024 році

Цифрові бейджі Huawei ICT Academy

- Успішно складіть онлайн-іспит «End of Course», щоб отримати цифровий бейдж
- Цифровий бейдж - це безпечний і перевірений спосіб продемонструвати та довести свої досягнення.



Скануйте аби дізнатись більше



Instructor Badge



Professional Course Badge



General Course Badge

Опис готових курсів





ICT Academy ▶ General Course ▶ General Technology

Algorithm and Program Design

GO [Enroll Now](#)

← [Map](#)

[Badge](#)

Course Profile

Overview

《Algorithm and Program Design》 is a basic course for all majors. The main goal is to train students to master the knowledge of basic algorithms systematically and flexibly apply basic algorithms.

Highlights

This course complies with the requirements of "Select cases, explain the profound in simple terms, and focus on capability development". This course uses cases to explain common algorithms and highlight the core position and guiding role of algorithms in solving actual problems.

Target Audience

Secondary specialized school student, Junior college student, Undergraduate, General audience

Applicable Majors

All majors

Duration

6 chapters

Recommended Follow-up Course

None

- ☒ Self-study
- ☐ Lab environment
 - ☐ Physical devices
 - ☐ Online experiment
 - ☐ Simulator
- ☒ Completion certificate



Course Outline

- Maximum common divisor
- Iteration
- Dichotomy
- Recursion
- Search and Rollback
- Monte Carlo algorithm

Course Structure

- 6 course modules
- 1 course satisfaction survey



ICT Academy ▶ General Course ▶ General Technology

Digital Power

[Go](#) [Enroll Now](#)

[Map](#)

[Badge](#)

Course Profile

Overview

This course explains the role that ICT can play in transitioning to a world less dependent on fossil fuels.

Highlights

Taught by the highly engaging telecom engineer Mike MacDonald, this course explains why transitioning to a world mostly powered by renewables is challenging. But it is also very feasible. Students learn why the transition is urgent, the vital role of power storage, how cars of the future will differ from today's, and how data centers and base stations are becoming ever more energy-efficient.

Target Audience

Secondary specialized school student, Junior college student, Undergraduate, General audience

Applicable Majors

All majors

Duration

7 chapters, 4-7 minutes each.

Recommended Follow-up Course

None

- ☒ Self-study
- ☐ Lab environment
 - ☐ Physical devices
 - ☐ Online experiment
 - ☐ Simulator
- ☒ Completion certificate



Course Outline

- The need for a new grid
- Greener generation
- Storage, importance and how
- Low-carbon transportation
- Green base station sites
- Energy-efficient data centers
- Living with a smart grid

Course Structure

- 7 course modules
- 1 Final Exam



ICT Academy ▶ General Course ▶ General Technology

5G Basics: What it's all about

GO [Enroll Now](#)

[Map](#)

[Badge](#)

Course Profile

Overview

This introduction to 5G equips students with basic tech knowledge and a solid perspective on what 5G is, where it comes from, and what it can do. No tech background required.

Highlights

Taught by the highly-entertaining telecom engineer Mike MacDonald, this information-packed course discusses not only 5G but also the wireless network technologies that have preceded it. Students get a technical overview of 5G, a historical perspective, as well as learning why 5G is safe for environment and humans.

Target Audience

Secondary school and college students with no tech background, early-career non-tech professionals joining a tech company, general public.

Applicable Majors

All majors

Duration

7 chapters, 4-7 minutes each.

Recommended Follow-up Course

5G Network and Applications

- ☒ Self-study
- ☐ Lab environment
 - ☐ Physical devices
 - ☐ Online experiment
 - ☐ Simulator
- ☒ Completion certificate



Course Outline

- History of wireless, 1G-5G
- 5G, ahead of future needs
- How global standards made 5G a reality
- The importance of spectrum
- The techs that make up 5G
- Cloudification
- 5G safety for people and environment

Course Structure

- 7 chapters
- 1 final exam
- 1 course satisfaction survey



ICT Academy ▶ General Course ▶ General Technology

5G Network Architecture and Key Technologies

[Enroll Now](#)

[Map](#)

[Badge](#)

Course Profile

Overview

This course introduces the 5G network new architecture and key technologies.

Highlights

By learning this course, trainees can understand 5G business scenarios ,key capabilities, key technologies used in 5G and new 5G network architecture.

Target Audience

Secondary specialized school student, Junior college student, Undergraduate, General audience

Applicable Majors

All majors

Duration

2 chapters, 20 minutes each.

Recommended Follow-up Course

5G Network and Applications

- ☒ Self-study
- ☐ Lab environment
 - ☐ Physical devices
 - ☐ Online experiment
 - ☐ Simulator
- ☒ Completion certificate

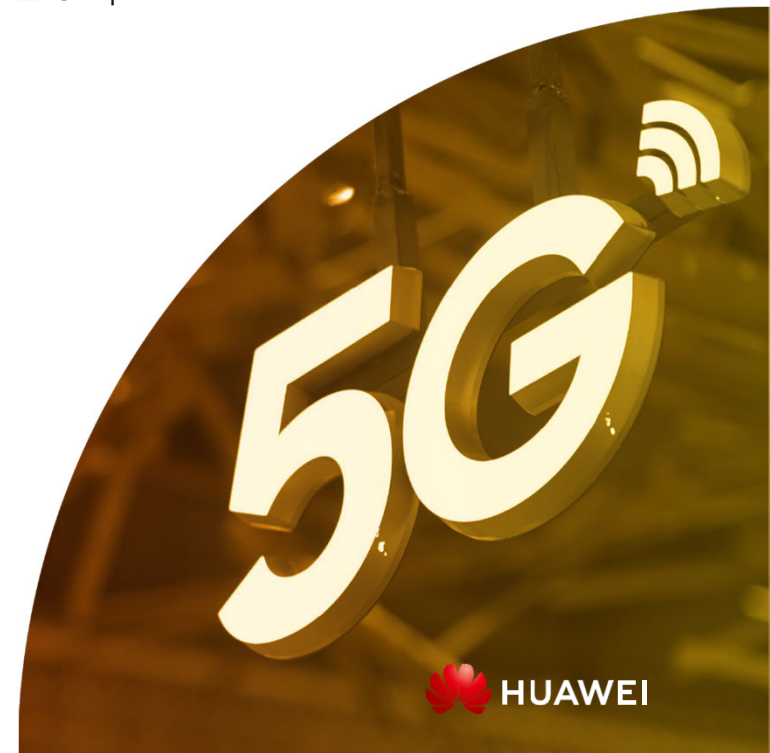


Course Outline

- 5G Key Capabilities and Network Architecture
- 5G New Air Interface

Course Structure

- 2 chapters
- 1 final exam
- 1 Acronym and Abbreviation





ICT Academy ▶ Professional Course ▶ 5G

5G Network and Applications

[GO Sign up today](#)

[Map](#)

[Badge](#)

[If you are already a student, contact your academy.](#)

Course Profile

Overview

5G Network and Applications is aimed at students in information sciences and communication engineering majors to help them understand basic mobile communication networks and key 5G network technologies, cultivate their 5G service skills, and understand 5G solutions in related industries.

Highlights

This course addresses the talent gap in 5G. It is designed as vocational training. It includes 32 hours of theory, covering 5G development and evolution, 5G network architecture and key technologies, innovative 5G applications, basic 5G services and functions, and 5G industry application solutions.

Career Guidance

- After completing this course, students will have the knowledge and skills required for 5G industry solution engineers and pre-sales solution engineers.
- **After completing this course, students can directly take the HCIA- 5G certification exam.**

Target Audience

Secondary vocational college student, higher vocational college student, undergraduate

Duration

32 lessons (all for theory)

Applicable Majors

Majors related to information sciences and communication engineering

Required Knowledge

Communication principles

Recommended Follow-up Course

None

Course Outline



- 5G development and evolution
- 5G network architecture and key technologies
- Innovative 5G applications
- Basic 5G services and functions
- 5G industry applications and solutions

Course Structure

- 56 course modules
- 4 quizzes
- 1 final exam
- 1 course satisfaction survey

- ☒ Instructor-led
- ☐ Lab environment
 - ☐ Physical devices
 - ☐ Online experiment
 - ☐ Simulator
- ☒ Completion certificate





ICT Academy ▶ General Course ▶ General Technology

Computer Network

[Enroll Now](#)

[Map](#)

[Badge](#)

Course Profile

Overview

Computer Network is aimed at students in all majors to learn the basic scientific concepts about computer networks, the Internet, and the Internet of Things (IoT).

Highlights

This course introduces the concept of computer network, operation of Internet services, and basics of IoT and Internet through vivid real-life examples.

Target Audience

Secondary specialized school student, Junior college student, Undergraduate, General audience

Applicable Majors

All majors

Duration

1–2 lessons

Recommended Follow-up Course

Data Communication and Network Technology

- ☒ Self-study
- ☐ Lab environment
 - ☐ Physical devices
 - ☐ Online experiment
 - ☐ Simulator
- ☒ Completion certificate



Course Outline

- Computer networks
- Internet protocols
- Network resource sharing
- IoT
- Network operating system — VRP
- Huawei switch VLAN configuration

Course Structure

- 15 course modules
- 2 experimental modules
- 1 final exam
- 1 course satisfaction survey





ICT Academy ▶ Professional Course ▶ Data Communication

Data Communication and Network

[GO Sign up today](#)

[Map](#)

[Badge](#)

[If you are already a student, contact your academy.](#)

Course Profile

Overview

Data Communication and Network is intended for students in information science and computer majors to develop their skills in enterprise network construction, O&M, management, and troubleshooting.

Highlights

This course addresses the talent gap in datacom networks. It is designed as vocational training, and includes lab practice and in-class quizzes.

Career Guidance

- Upon completing this course, students will be able to build an enterprise network with routers and switches, WLAN, and network security technologies, as well as perform routine network O&M and troubleshooting.
- **After completing this course, students can directly take the HCIA-Datacom certification exam.**

Target Audience

Secondary vocational college student, higher vocational college student, undergraduate

Duration

128 lessons (56 for theory and 72 for hands-on practice)

Applicable Majors

Majors related to information sciences and computers

Required Knowledge

Routing and switching basics, computer application fundamentals

Recommended Follow-up Courses

HCIP-Datacom-Carrier IP Bearer
HCIP-Datacom-Advanced Routing & Switching Technology
HCIP-Datacom-Network Automation Developer
HCIP-Datacom-Campus Network Planning and Deployment
HCIP-Datacom-SD-WAN Planning and Deployment
HCIP-Datacom-Enterprise Network Solution Design
HCIP-Datacom-WAN Planning and Deployment

- ☐ Instructor-led
- ☒ Lab environment
 - ☒ Physical devices
 - ☒ Online experiment
 - ☐ Simulator
- ☒ Completion certificate

Course Outline



- Ethernet switch networks
- WAN fundamentals
- Interconnected IP networks
- Data communication and network fundamentals
- WLAN fundamentals

- WAN technology
- Network security, services, and applications
- SDN and network automation fundamentals
- Typical campus network architecture and cases

Course Structure

- 173 course modules
- 37 experimental modules
- 22 quizzes
- 1 final exam
- 1 course satisfaction survey





ICT Academy ▶ General Course ▶ General Technology

Overview of AI

[Enroll Now](#)

[Map](#)

[Badge](#)

Course Profile

Overview

Overview of AI is aimed at students in all majors to gain a basic understanding of the definition, working principles, and development of cloud computing.

Highlights

This course introduces the fundamentals of AI, covering the founding and history of AI, schools of thought, major technical trends, as well as controversies and prospects. This course is engaging and uses vivid real-life examples.

Target Audience

Secondary specialized school student, Junior college student, Undergraduate, General audience

Applicable Majors

All majors

Duration

1 – 2 lessons

Recommended Follow-up Course

Artificial Intelligence Technology and Applications

- ☒ Self-study
- ☐ Lab environment
 - ☐ Physical devices
 - ☐ Online experiment
 - ☐ Simulator
- ☒ Completion certificate

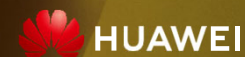


Course Outline

- Machines that think
- Schools of thought
- Strong AI vs Weak AI
- Three major trends in AI
- AI everywhere
- Controversies
- Bright prospects

Course Structure

- 7 course modules
- 1 final exam
- 1 course satisfaction survey





ICT Academy ▶ General Course ▶ General Technology

Search and AI

[Enroll Now](#)

[Map](#)

[Badge](#)

Course Profile

Overview

Search and Artificial Intelligence is aimed at students in all majors to gain a basic understanding of artificial intelligence and the typical applications of search algorithms.

Highlights

This course uses game tree cases to introduce the concept of search algorithms and basics of artificial intelligence.

Target Audience

Secondary specialized school student, Junior college student, Undergraduate, General audience

Applicable Majors

All majors

Duration

1 – 2 lessons

Recommended Follow-up Course

Artificial Intelligence Technology and Applications

- ☒ Self-study
- ☒ Lab environment
 - ☐ Physical devices
 - ☒ Online experiment
 - ☐ Simulator
- ☒ Completion certificate

Course Outline



- Game tree and pruning
- Heuristic search
- AI and machine learning
- Typical AI applications
- AI development platforms

Course Structure

- 13 course modules
- 2 experimental modules
- 1 final exam
- 1 course satisfaction survey



ICT Academy ▶ Professional Course ▶ Artificial Intelligence

Artificial Intelligence Technology and Applications

[Sign up today](#)

[Map](#)

[Badge](#)

[If you are already a student,](#)
contact your academy.

Course Profile

Overview

Artificial Intelligence Technology and Applications is intended for students in computer majors to cultivate their ability to use algorithms such as machine learning and deep learning.

Highlights

With AI talent in high demand, we have designed this as a crash course to learn both AI theory and practical skills taught through hands-on projects. Students will complete 32 lessons of theory and 32 lessons of lab practice, covering AI, Python basics, commonly used algorithms for machine learning, and deep learning basics.

Career Guidance

- After completing this course, students will be able to master the basic principles of machine learning and deep learning, laying a solid foundation for future AI project planning and solution design.
- **After completing this course, students can directly take the HCIA-AI certification exam.**

Target Audience

Secondary vocational college student, higher vocational college student, undergraduate

Duration

64 lessons (32 for theory and 32 for hands-on practice)

Applicable Majors

Majors related to AI and computers

Required Knowledge

Python basics, probability theory and mathematical statistics, and programming

Recommended Follow-up Courses

HCIP-AI-EI Developer

☒ Instructor-led

☒ Lab environment

☐ Physical devices

☒ Online experiment

☐ Simulator

☒ Completion certificate

Course Outline



- Artificial intelligence overview
- Python programming basics
- Machine learning overview
- Deep learning overview
- AI development framework
- Introduction to Huawei AI platforms
- Cutting-edge AI applications
- Quantum computing and machine learning

Course Structure

- 28 course modules
- 20 experimental modules
- 1 AI final exam lab
- 1 final exam





ICT Academy ▶ General Course ▶ General Technology

Development and Basic Concepts of Cloud Computing

[Go](#) [Enroll Now](#)

[Map](#)

[Badge](#)

Course Profile

Overview

Development and Basic Concepts of Cloud Computing is aimed at students in all majors to gain a basic understanding of cloud computing and its architecture.

Highlights

This course focuses on the basic concepts of cloud computing, cloud architecture, and development trends. Upon completing this course, students will be able to define cloud computing as well as understanding its history, features, and deployment models.

Target Audience

Secondary specialized school student, Junior college student, Undergraduate, General audience

Applicable Majors

All majors

Duration

1 – 2 lessons

Recommended Follow-up Course

Principles and Applications of Cloud Computing

- ☒ Self-study
- ☐ Lab environment
 - ☐ Physical devices
 - ☐ Online experiment
 - ☐ Simulator
- ☒ Completion certificate

Course Outline



- Cloud — already here
- Advantages
- Definition
- History and trends
- Deployment models
- Service models
- Cloud architecture
- Cloud: enabler of new tech

Course Structure

- 18 course modules
- 8 quizzes
- 1 final exam
- 1 course satisfaction survey



ICT Academy ▶ General Course ▶ General Technology

Cloud Advanced: Architecture and Technologies

[GO](#) [Enroll Now](#)

[Map](#)

[Badge](#)

Course Profile

Overview

This course introduces basic knowledge of cloud data centers and virtualization technology and some of cloud services provided Huawei.

Highlights

By learning this course, trainees can learn about the architecture of cloud, from data centers to cloud services and key technology of cloud, virtualization.

Target Audience

Secondary specialized school student, Junior college student, Undergraduate, General audience

Applicable Majors

All majors

Duration

1 – 2 lessons

Recommended Follow-up Course

Principles and Applications of Cloud Computing

- ☒ Self-study
- ☐ Lab environment
 - ☐ Physical devices
 - ☐ Online experiment
 - ☐ Simulator
- ☒ Completion certificate

Course Outline



- Introduction to Cloud Data center
- Introduction to Compute Virtualization
- Cloud service

Course Structure

- 5 course modules
- 3 quizzes
- 1 final exam
- 1 Abbreviation and Terms





ICT Academy ▶ Professional Course ▶ Cloud Computing

Principles and Applications of Cloud Computing

[GO Sign up today](#)

[Map](#)

[Badge](#)

[If you are already a student, contact your academy.](#)

Course Profile

Overview

Principles and Applications of Cloud Computing mainly introduces virtualization-related computing, network, and storage, as well as virtualization features, helping students quickly understand cloud computing.

Highlights

This course explains cloud computing basics, how to use virtualization technology to implement the basic features of cloud computing, and the role of virtualization technology in cloud computing. It covers cloud computing, computing virtualization, basic network knowledge in cloud computing, basic storage knowledge in cloud computing, virtualization features, and cloud computing trends. Students will learn how to configure Huawei FusionCompute.

Career Guidance

- Upon completing this course, students will understand the basic concepts in cloud computing, such as computing, network, storage virtualization, and virtualization features. They will also be able to perform basic cloud computing operations.
- **After completing this course, students can directly take the HCIA- Cloud Computing certification exam.**

Target Audience

Secondary vocational college student, higher vocational college student, undergraduate

Duration

32 lessons (16 for theory and 16 for hands-on practice)

Applicable Majors

Majors related to cloud computing

Required Knowledge

IT fundamentals, server and PC operating system, Linux, and storage

Recommended Follow-up Course

HCIP-Cloud Computing

- ☒ Instructor-led
- ☒ Lab environment
 - ☒ Physical devices
 - ☐ Online experiment
 - ☐ Simulator
- ☒ Completion certificate

Course Outline



- Cloud computing overview
- Compute virtualization
- Network fundamentals for cloud computing
- Storage fundamentals for cloud computing
- Virtualization features
- Cloud computing trends

Course Structure

- 28 course modules
- 3 experimental modules
- 6 quizzes
- 1 final exam





ICT Academy ▶ Professional Course ▶ Cloud Service

Cloud-Tech Essentials

[Sign up today](#)

[Map](#)

[If you are already a student,
contact your academy.](#)

Course Profile

Overview

Cloud-Tech Essential focus on compute, storage, networking, database, security, and deployment services of Cloud.

Highlights

This course includes the introduction to HUAWEI CLOUD, computing cloud services, network cloud services, and storage cloud services, and provides lab operations for corresponding hours.

Career Guidance

- After learning this course, students can master the usage of cloud service components. Lays a solid foundation for learning advanced services and deploying more complex architectures.
- **After completing this course, students can directly take the HCCDA-Tech Essentials certification exam.**

Target Audience

Secondary vocational college student, higher vocational college student, undergraduate

Duration

32 lessons

Applicable Majors

Majors related to computers

Required Knowledge

IT fundamentals

Recommended Follow-up Course

HCCDA-Tech Essentials

- ☒ Instructor-led
- ☒ Lab environment
 - ☐ Physical devices
 - ☒ Online experiment
 - ☐ Simulator
- ☒ Completion certificate



Course Outline

- Infrastructure and Computing Capabilities
- Storage and Networking
- Security and Deployment
- Database and Data Governance
- Distributed Deployment and Scalability
- Cloud Native and Digital Transformation

Course Structure

- 15 course modules
- 6 experimental modules
- 1 final exam
- 1 course satisfaction survey



ICT Academy ▶ General Course ▶ General Technology

Information Representation and Data Organization

[Enroll Now](#)

[Map](#)

[Badge](#)

Course Profile

Overview

Information Representation and Data Organization is aimed at students in all majors to gain a basic understanding on representing information and organizing data in computers.

Highlights

This course introduces the concepts of information and data, the way they are represented and organized in a computer system, along with basic knowledge presented through engaging real-life cases.

Target Audience

Secondary specialized school student, Junior college student, Undergraduate, General audience

Applicable Majors

All majors

Duration

1 – 2 lessons

Recommended Follow-up Courses

HCIA-Big Data

- ☒ Self-study
- ☐ Lab environment
 - ☐ Physical devices
 - ☐ Online experiment
 - ☐ Simulator
- ☒ Completion certificate

Course Outline



- Information representation
- Information encryption, decryption, and compression
- Data organization and structure

Course Structure

- 8 course modules
- 1 final exam
- 1 course satisfaction survey



ICT Academy ▶ General Course ▶ General Technology

Data Management and Analytics

[Enroll Now](#)

[Map](#)

[Badge](#)

Course Profile

Overview

Data Management and Analytics is aimed at students in all majors to gain a basic understanding on managing and analyzing data in the digital era.

Highlights

This course introduces the functions of computer data management along with the foundations and methods for data management and analysis using real-life examples.

Target Audience

Secondary specialized school student, Junior college student, Undergraduate, General audience

Applicable Majors

All majors

Duration

1 – 2 lessons

Recommended Follow-up Course

HCIA-openGauss

- ☒ Self-study
- ☒ Lab environment
 - ☒ Physical devices
 - ☐ Online experiment
 - ☐ Simulator
- ☒ Completion certificate

Course Outline



- Data categories
- Data management
- Data modes
- Relational models and operations

Course Structure

- 9 course modules
- 1 experimental modules
- 1 Final Exam
- 1 course satisfaction survey



ICT Academy ▶ Professional Course ▶ Storage

Data Storage

[Sign up today](#)

[Map](#)

[Badge](#)

[If you are already a student,
contact your academy.](#)

Course Profile

Overview

Data Storage is intended for students in computer applications and communication engineering majors to improve their skills in the configuration, networking, and maintenance of storage products.

Highlights

Aligned with Huawei certifications, this course introduces the skills required for field work. Students learn through well-designed learning routes and lab practice to meet enterprise needs in the future.

Career Guidance

- Upon completing this course, students will be able to install, deploy, and routinely manage storage platforms based on customers' requirements, laying a solid foundation for future work.
- **After completing this course, students can directly take the HCIA-Data Storage certification exam.**

Target Audience

Secondary vocational college student, higher vocational college student, undergraduate

Duration

64 lessons (32 for theory and 32 for hands-on practice)

Applicable Majors

Majors related to information sciences and computers

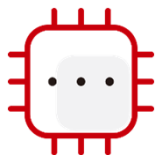
Required Knowledge

Operating system theory and technology, fundamentals of database and computer applications

Recommended Follow-up Courses

HCIP-Storage

Course Outline



- Basic storage technology
- Storage and relevant notions
- Advanced storage technologies
- Storage O&M management
- Service continuity technology and applications

Course Structure

- 40 course modules
- 7 experimental modules
- 5 quizzes
- 1 final exam
- 1 course satisfaction survey

- ☒ Instructor-led
- ☒ Lab environment
 - ☒ Physical devices
 - ☒ Online experiment
 - ☒ Simulator
- ☒ Completion certificate



ICT Academy ▶ Professional Course ▶ WLAN

Principles and Applications of WLAN

[GO Sign up today](#)

[Map](#)

[Badge](#)

[If you are already a student,
contact your academy.](#)

Course Profile

Overview

Principles and Applications of WLAN is intended for students in computer, information science, and communication engineering majors to cultivate their skills in WLAN planning, construction, O&M, management, and troubleshooting.

Highlights

This course addresses the talent gap in WLAN. It is designed as vocational training, founded on scientific methodologies in teaching. It includes 32 lessons of theory and 32 lessons of lab practice, covering the basics of WLAN technology, WLAN networking models, WLAN working principles, WLAN online configuration, WLAN access authentication, WLAN antenna technology, and WLAN network troubleshooting.

Career Guidance

- Upon completing this course, students will be able to use WLAN planning, networking, configuration, and authentication technologies to build an enterprise-class WLAN based on actual network requirements. Moreover, they will be able to perform routine maintenance and troubleshooting on WLANs based on WLAN working principles.
- **After completing this course, students can directly take HCIA-WLAN certification exam.**

Target Audience

Secondary vocational college student, higher vocational college student, undergraduate

Duration

64 lessons (32 for theory and 32 for hands-on practice)

Applicable Majors

Majors related to computers, information sciences, and communication engineering

Required Knowledge

PC operating system, computer, as well as routing and switching fundamentals

Recommended Follow-up Courses

HCIP-WLAN
HCIP-Datacom-Advanced Routing & Switching Technology
HCIP-Datacom-Network Automation Developer
HCIP-Datacom-Campus Network Planning and Deployment
HCIP-Datacom-Enterprise Network Solution Design

Course Outline



- WLAN overview
- WLAN working principles
- WLAN networking models
- WLAN configuration
- WLAN access authentication
- WLAN troubleshooting
- Wi-Fi 6 technology

Course Structure

- 41 course modules
- 12 experimental modules
- 4 quizzes
- 1 final exam

Instructor-led ☒

☒ Lab environment

☒ Physical devices

☐ Online experiment

☐ Simulator

☒ Completion certificate





ICT Academy ▶ General Course ▶ General Technology

Overview of IoT Technologies

[GO](#) [Enroll Now](#)

[Map](#)

[Badge](#)

Course Profile

Overview

This course introduces IoT overview, NB-IOT and IOT gateway. By learning this course, can help learner have a deeper understanding about IOT.

Highlights

This course focuses on the development and evolution of IOT , the concept and feature of NB-IOT , the solution of IOT gateway . Upon completing this course, students will be able to define the IoT as well as understanding its history and features.

Target Audience

Secondary specialized school student, Junior college student, Undergraduate, General audience

Applicable Majors

All majors

Duration

1 – 2 lessons

Recommended Follow-up Course

Internet of Things Technology and Application

- ☒ Self-study
- ☐ Lab environment
 - ☐ Physical devices
 - ☐ Online experiment
 - ☐ Simulator
- ☒ Completion certificate

Course Outline



- Getting to Know
- Narrowband Wireless Network, Massive IoT Connections
- IoT Gateway, Converged Backhaul

Course Structure

- 9 course modules
- 1 Final Exam





ICT Academy ▶ Professional Course ▶ Internet of Things

Internet of Things Technology and Applications

[Sign up today](#)

[Map](#)

[Badge](#)

[If you are already a student,
contact your academy.](#)

Course Profile

Overview

Internet of Things and Applications is intended for students in computer applications and communication engineering majors to improve their skills in embedded development and IoT solution development.

Highlights

This hands-on course integrates theory and practice to equip students with the necessary skills for actual jobs and enterprise projects.

Career Guidance

- Upon completing this course, students will be able to select appropriate IoT devices, networks, platforms, and applications to develop a complete IoT solution based on customers' requirements, preparing them for the job market.
- **After completing this course, students can directly take the HCIA- IoT certification exam.**

Target Audience

Secondary vocational college student, higher vocational college student, undergraduate

Duration

40 lessons (28 for theory and 12 for hands-on practice)

Applicable Majors

Majors related to computer applications and communication engineering

Required Knowledge

Operating system principles and technologies, basic C language, data communication, analog electronic circuits, and digital electronic circuits

Recommended Follow-up Course

HCIP-IoT Developer

☒ Instructor-led

☒ Lab environment

☒ Physical devices

☐ Online experiment

☐ Simulator

☒ Completion certificate

Course Outline



- History and Overview of IOT
- IOT Industry Applications and Solutions
- IOT Today
- Data Collection Technologies
- MCU Basics
- IOT OS Overview
- IOT Communications Technologies

Course Structure

- 26 course modules
- 15 experimental modules
- 1 lab exam
- 1 final exam





ICT Academy ▶ Professional Course ▶ openEuler

Operating System Basics and Practice A Hands-on Approach with openEuler

[GO Sign up today](#)

[Map](#)

[Badge](#)

[If you are already a student, contact your academy.](#)

Course Profile

Overview

openEuler stands as a versatile open source OS that evolved from the Linux kernel. Its robust architecture encompasses multi-platform support, advanced security features, and intelligent capabilities, serving diverse environments from enterprise servers to cloud-native applications, edge computing, and embedded systems.

Highlights

This course focuses on three core areas: operating system (OS) basics, UNIX design philosophy, and openEuler practical applications. By seamlessly blending theoretical knowledge, design principles, and hands-on practices, it explores advanced areas like the openEuler development environment, embedded OS development, network management, server administration, and open source innovation within openEuler.

Career Guidance

Upon completing this course, students will be able to understand the fundamental functions of operating systems, explore openEuler's dual interface systems, grasp fundamental OS design principles, master key administrative capabilities and techniques in openEuler server systems.

Target Audience

Undergraduate and graduate students majoring in computer science, automation, electronic measurement, and related disciplines

Duration

32 lessons

Applicable Majors

Majors related to information sciences and computers

Required Knowledge

Operating system theory and technology

Recommended Follow-up Courses

HCIP-openEuler

☒ Instructor-led

☐ Lab environment

☐ Physical devices

☐ Online experiment

☐ Simulator

☒ Completion certificate



Course Outline

- Overview
- Introduction to Oss
- Getting Started with openEuler
- OS Principles and Practice
- openEuler Development Environment
- Embedded OS Development
- Network Basics and Management
- Server OS Management
- Open Source Innovation within openEuler

Course Structure

- 55 course modules
- 9 quizzes
- 1 final exam
- 1 course satisfaction survey





ICT Academy ▶ Professional Course ▶ ICT Competition

Huawei ICT Competition 2023-2024 Practice Competition Practical Course

[Map](#)

[Network Track](#) [GO](#)

[Cloud Track](#) [GO](#)

[Computing Track](#) [GO](#)

Course Profile

Overview:

The *Huawei ICT Competition 2023–2024 Practice Competition Practical Course* contains four modules and covers three tracks: Network, Cloud, and Computing. Using real exam questions, this course provides an authentic competition environment and a detailed analysis of key exam topics to help participants excel in the upcoming competition.

Highlights:

Through this course, you will become familiar with the exam format and difficulty, understand the exam structure, focus on key topics, and assess your learning progress. You will have the chance to enhance your technical application skills in preparation for the upcoming Huawei ICT Competition.

Target Audience:

Student participants of the Huawei ICT Competition – Practice Competition

Relevant majors:

Electronics and Information Engineering, Software Engineering, Artificial Intelligence, Computer Science, and related fields



Course Outline:

- Exam Outline and Analysis
- Preliminary Stage Past Exam Questions
- National Stage Past Exam Questions
- Regional Stage Past Exam Questions
- Global Final Past Exam Questions
- Learning Space





ICT Academy ▶ General Course ▶ General Technology

Exploring the Intelligent World 2030

[Go](#) [Enroll Now](#)

[Map](#)

[Badge](#)

Course Profile

Overview

This course aims to help students master the core content of the Intelligent World 2030 and understand the development trend of the global ICT industry.

Highlights

This course will foster a deep understanding of digital transformation and improve understanding of the future intelligent world. This course will foster students' innovative thinking and improve practical skills through case studies and practice analysis.

Target Audience

Secondary specialized school student, Junior college student, Undergraduate, General audience

Applicable Majors

All majors

Duration

4 lessons

Recommended Follow-up Course

None

- ☒ Self-study
- ☐ Lab environment
 - ☐ Physical devices
 - ☐ Online experiment
 - ☐ Simulator
- ☒ Completion certificate

Course Outline



- Embracing Intelligence for a Thriving Digital Economy
- Schools of thought
- Macro Outlooks for the Intelligent World 2030
- Intelligent World 2030: ICT Business and Solution Exploration
- The Journey to All Intelligence
- Global Digitalization Index (GDI) 2024

Course Structure

- 5 course modules
- 1 final exam
- 1 course satisfaction survey



HUAWEI



Thank you.

把数字世界带入每个人、每个家庭、
每个组织，构建万物互联的智能世界。

Bring digital to every person, home, and
organization for a fully connected,
intelligent world.

**Copyright©2025 Huawei Technologies Co., Ltd.
All Rights Reserved.**

The information in this document may contain predictive statements including, without limitation, statements regarding the future financial and operating results, future product portfolio, new technology, etc. There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied in the predictive statements. Therefore, such information is provided for reference purpose only and constitutes neither an offer nor an acceptance. Huawei may change the information at any time without notice.

